



Letter to the Editor

Naphyrone: Analytical profile of the new “legal high” substitute for mephedrone

Dear Editor,

Mephedrone (4-methylmethcathinone) has been banned recently in several countries, including the UK as from April 2010. Banning of the drug in the UK followed a report from the Advisory Council on the Misuse of Drugs¹ and newspaper reports of several deaths linked to mephedrone.² Soon after mephedrone was banned, internet sites³ began to market a new legal alternative – naphyrone, which is also known as NRG-1. The structure of this new designer drug is similar to that of pyrovalerone, a monoamine uptake inhibitor, first synthesized in 1964.⁴ As with mephedrone, presently there is no safety or toxicity data available for naphyrone, which in its turn has now been banned in the UK as from July 12, 2010.⁵ Anticipating the problem of having to identify the drug in routine forensic toxicology drug screens, we purchased naphyrone from a website, since it is not available as a pure standard from certified sources. Analysis of the drug undertaken by HPLC-DAD, GC-MS and LC-MS-MS using our current standard laboratory drug screening methods has produced a useful analytical profile for naphyrone. Detailed analytical data and naphyrone's UV and mass spectra can be found at: <http://www.dundee.ac.uk/forensicmedicine/drugmonographs/naphyrone>. This analytical data should assist the wider forensic community in identifying naphyrone in routine toxicology screening.

Conflict of Interest

The authors have no conflict of interest to declare.

Appendix. Supplementary data

Supplementary data related to this article can be found online at doi:[10.1016/j.jflm.2010.12.001](https://doi.org/10.1016/j.jflm.2010.12.001).

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Giorgia De Paoli, PhD, Lecturer in Forensic Toxicology*,
Peter D. Maskell, PhD, FHEA, Lecturer in Forensic Toxicology,
Derrick J. Pounder, MB ChB, FRCPA, FFPATHRCPI, FRCPATH, FFFLM,
FRSPH, FCFP, Professor of Forensic Medicine
Centre for Forensic and Legal Medicine, University of Dundee, Dundee,
DD1 4HN, Scotland, United Kingdom

* Corresponding author.

E-mail address: g.depaoli@dundee.ac.uk (G. De Paoli)

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